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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,183	12/05/2001	Hyun Duk Cho	P-0309	3476

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EXAMINER

PHILIPPE, GIMS S

ART UNIT PAPER NUMBER

2613

DATE MAILED: 12/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/002,183

Applicant(s)

CHO ET AL.

Examiner

Gims S Philippe

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 11, 18 and 19 is/are rejected.
- 7) ☒ Claim(s) 9, 10, 12-17 and 20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12062004
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

DETAILED ACTION

This is a first action in response to application no.10/002,183 filed on December 5th 2001 in which claims 1-20 are presented for examination.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-7, 11-12, 17-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim et al. (US Patent no. 6498810).

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The applied reference has a common Assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1, Kim discloses the same method for coding a motion vector comprising the steps of computing two-dimensional prediction error information by using a motion vector to be coded and the n ($n \geq 11$) number of neighboring motion vectors (See Kim col. 3, lines 31-33), selecting prediction error information having the minimum bitrate from the computed prediction error information (See col. 3, lines 37-41), obtaining mode information indicative of a neighboring motion vector which has occurred the prediction error information of the minimum bitrate (See col. 3, lines 45-47), and coding the obtained prediction error information of the minimum bitrate and the mode information (See Kim col. 3, lines 49-51).

Regarding claims 2-7, 11, and 17-19, most of the limitations of these claims have been noted in the above rejection of claim 1. In addition, Kim further checks whether factors of obtained prediction error information of the minimum bitrate are 0 and coding the prediction error information of the minimum bitrate (See Kim col. 6, lines 19-25 and

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detailed in col. 4, lines 31-51 and see fig. 6). Note that the 0 minimum bit rate is understood as being the equation of line 64 of col. 4).

As per claim 12, Kim further provides the prediction error information of minimum bitrate as a two-dimensional one (See col. 4, lines 7-13).

3. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Sugiyama (US Patent no. 6271885).

Regarding claim 1, Sugiyama discloses the same method for coding a motion vector comprising the steps of computing two-dimensional prediction error information by using a motion vector to be coded and the n ($n \geq 11$) number of neighboring motion vectors (See Sugiyama col. 3, lines 4-8, lines 47-49), selecting prediction error information having the minimum bitrate from the computed prediction error information (See col. 5, lines 7-27), obtaining mode information indicative of a neighboring motion vector which has occurred the prediction error information of the minimum bitrate (See col. 3, lines 27-39), and coding the obtained prediction error information of the minimum bitrate and the mode information (See col. 5, lines 7-18).

4. Claims 8-10, 13-16, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Karczewicz et al. (US Patent no. 6735249) teaches apparatus and associated method, for forming a compressed motion vector field utilizing predictive motion coding.

Chinag et al. (US Patent no. 6690833) teaches apparatus and method for macroblock based rate control in a coding system.

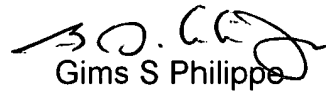
Ebrahim (US Patent no. 5594504) teaches predictive video coding using a motion vector updating routine.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gims S Philippe whose telephone number is (703) 305-1107. The examiner can normally be reached on M-F (9:30-7:00) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris S Kelley can be reached on (703) 305-4780. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Gims S Philippe
Primary Examiner
Art Unit 2613

GSP

December 7, 2004